Climate Centre for Cities

CLIMATE CENTRE FOR CITIES

STRATEGY DOCUMENT

2020

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Abbreviations

AFD	Agence Française de Développement, French Agency for Development
CSCAF	ClimateSmart Cities Assessment Framework
FAQ	Frequently Asked Questions
GDP	Gross Domestic Product
GHG	Green House Gases
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit, German Development Agency
ICCC	Integrated Command and Control Centre
INGO	International Non-Governmental Organization
KRAs	Key Result Areas
MoHUA	Ministry of Housing and Urban Affairs
NIUA	National Institute of Urban Affairs
NGO	Non-Governmental Organization
PMU	Peoject Management Unit
P4	Policy + Planning + Program + Project
SPV	Special Purpose Vehicle
ULB	Urban Local Body
USAID	United States Agency for International Development
WRI	World Resource Institute

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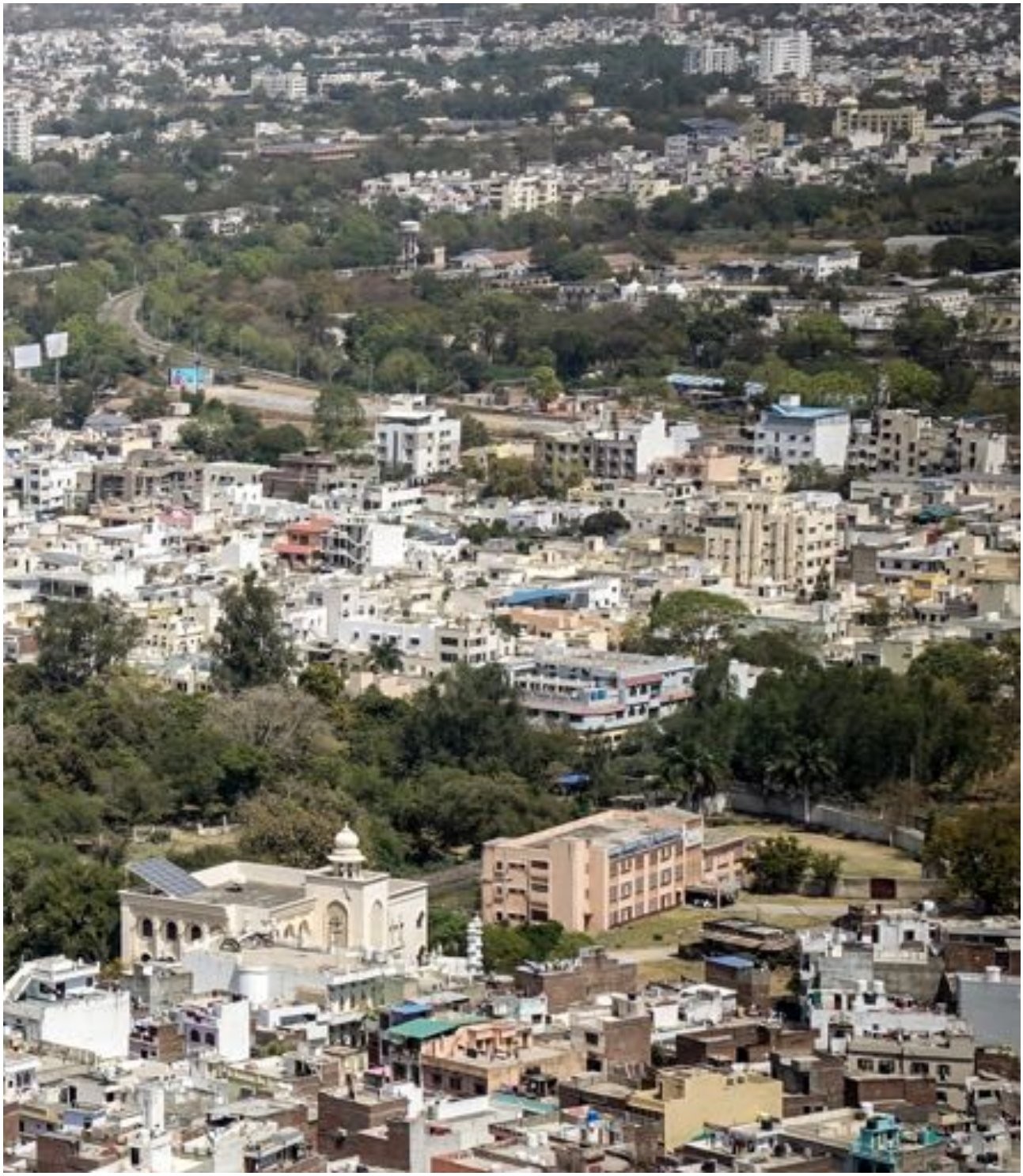
1.

Need for Climate Action in India

Sustainable and inclusive urban growth are essential in revealing the true benefits of India's urbanization. By 2030, the country's urban population is expected to be 590 million[1] and cities will be producing 70% of India's GDP[2]. Along with being an economic driver, cities have the opportunity to provide residents with a better quality of life with access to better service provision and infrastructure. Understanding the need, the Ministry of Housing and Urban Affairs has invested in promoting urban growth focussing on affordable housing, sustainable mobility, solid waste management and sanitation, water supply and sewerage, development of open/ green spaces, heritage conservation, redevelopment and renewal of core areas, and smart governance among others. Together, the missions initiated by MoHUA in 2014 aim towards an improved quality of life for urban dwellers.

While Indian cities are preparing for present challenges and are yet to prepare for future urbanization prospects, the impacts of climate variability and environmental change manifesting in the instances of cyclones, floods, heat waves, and drought have had adverse impacts on many Indian cities. In the last year, heavy monsoons resulted in cities like Kochi, Mumbai, Pune and Vadodara experiencing flooding and Chennai severely affected by water scarcity had to close schools and businesses. Such climate impacts cause loss of life as well as impact the economic growth. For instance, more than 60 persons lost their lives in Visakhapatnam after the 2014 Cyclone Hudhud and the city suffered loss of more than Rs.21,908 crore[3]. Similarly, the 2015 heavy rainfall in Chennai ended up costing the city Rs.9,800 crores in infrastructure damages and losses[4]. It is estimated that climate change will cost the Indian economy Rs.8.42 lakh crore by 2050 if emissions continue at their current rates. Other disasters like the Covid-19 outbreak has had severe impact on cities. 10 Indian cities, including Mumbai, Delhi, Ahmedabad, Indore and Pune have the highest number of people affected by the outbreak and account to more than half of the total number of people affected across the country.[6] The Covid-19 lockdown situation has disrupted the economy and is estimated to have an economic cost of approximately Rs.9 lakh crore, approximately 4% of the GDP.[7]

At a parallel front, considerable efforts are being made both at national and regional level to address disasters like floods, cyclones, disease outbreaks and heat waves. However, the increasing pace of urbanization and associated challenges are aggravating the vulnerability of cities to impacts from such risks. There is a pressing need to embed climate actions at the heart of urban discourse and as cities grow, urban governance and planning systems must be strengthened to ensure cities reach their maximum potential despite climate related challenges. Applying climate lens to urban projects will safeguard the interest of citizens and urban investments, and pave the way for a forward-looking, climate proof, inclusive and integrated urban transformation in India.



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2.

About NIUA

National Institute of Urban Affairs is a premier national think tank supported by the Government of India, mandated to develop cutting-edge research in the urban sector, disseminate through knowledge exchange and capacity development, and provide thought leadership for steering India's urban development. Over the years, NIUA has supported various levels of the government in policy advocacy, provided technical assistance, carried out research on various urban issues, developed toolkits and data frameworks, delivered training programmes particularly in resilience, river management and solid waste management, developed heritage conservation plans and is currently preparing strategic enabling plan for Delhi's 2041 master plan.

NIUA's expertise and experience encompasses the breadth and depth of addressing urban challenges along with working with both horizontal and vertical stakeholders. With an aim to build upon the strengths and transition to providing an integrated support for India's urban transformation, NIUA is restructuring its institutional framework. To enable this transition, 5 themes and 5 instruments are identified and the same are illustrated in Figure 2.1.

In the theme of 'Environment, Climate Change and Resilience', NIUA has associated with over 100 cities and has closely worked with over 25 cities for project implementation and technical assistance in the last decade. In addition to working with Ministry of Housing and Urban Affairs (MoHUA) and supporting the national programmes like Smart Cities and ClimateSmart Cities Assessment Framework, NIUA has partnered with various organizations including the Global Resilient Cities Network, AFD, USAID, GIZ and the Swiss Agency for Development and Corporation to promote climate actions through various initiatives. As a way forward to mainstream learnings from various projects and to drive climate action in Indian cities, NIUA intends to set up a Centre, 'Climate Centre for Cities' (C^3) under its theme of 'Environment, Climate Change and Resilience'.

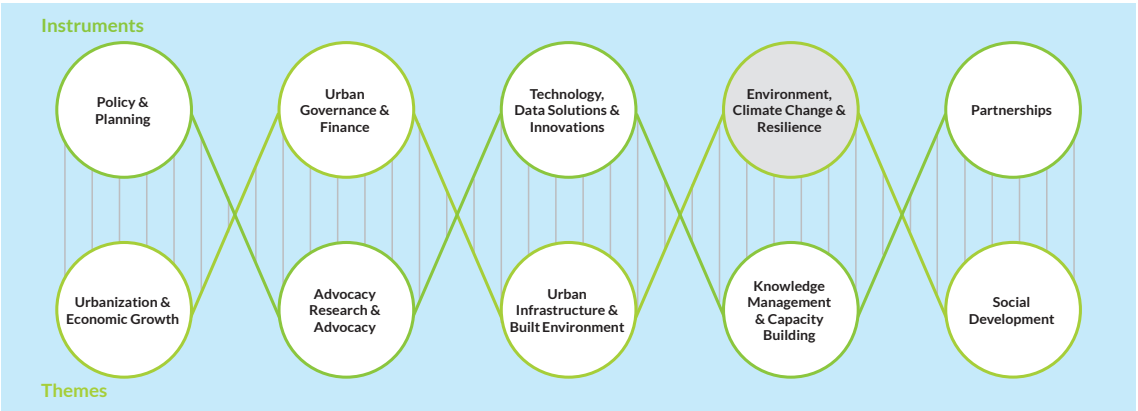


Figure 2.1 - Five themes and five instruments of NIUA

3.

About the Climate Centre for Cities

3.1. Vision

In the context of India's complex urban challenges and in addition to increasing climate risks, sustained actions ensuring cities prepare for and develop the ability to thrive in a varying climate is crucial. Given the rate of investments which are being diverted towards urban sectors in India, for example $30 billion for the smart cities program, the need for incorporating climate action within existing and future investments towards physical, social and environmental services is paramount to ensure sustainable development.

Our Vision

"To Build Climate Action in Cities"

Urban development informed by climate resilience is important for not only steering the growth towards a 5 trillion economy but also improving the quality of life of urban residents. This Centre aims to achieve that by creating a one stop shop for climate informed urban development actions facilitated by multi-stakeholder collaborations.

3.2. Objectives

To achieve the vision, the Centre will focus along six verticals, this will include but not limited to:

3.2.1. P4 Support (Policy + Planning + Program + Project)

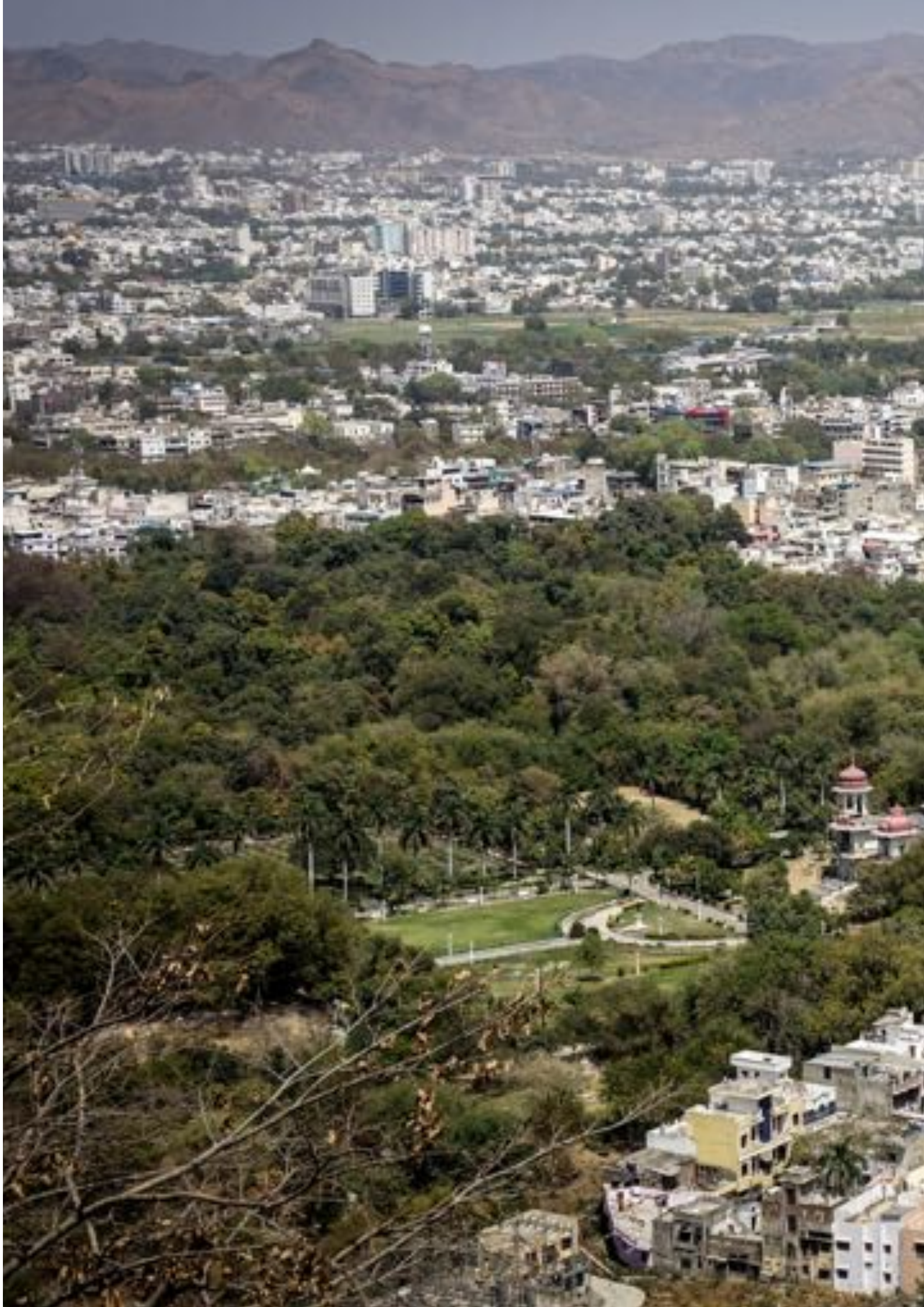
Enabling climate action in Indian cities will need broad activities ranging from review of policies to developing solutions for planning and implementation of climate resilient project interventions. The Centre will take a four step approach of enabling climate action. i. Developing policy recommendations, ii. developing planning toolkits for cities to incorporate climate change considerations in land use planning, master planning, housing and urban development, iii. implementing demonstrative local climate actions and iv. supporting the national program related to climate change.

3.2.2. Research and Knowledge Management

While some cities have begun to understand the need for climate interventions, translating their understanding to action needs to be informed by high quality research and knowledge products. The centre aims to promote, research on mapping current and future climate impacts at urban level, assessing loss and damage, developing climate resilient urban plans and disseminating the key findings to enable cities to plan in a forward looking and climate proof manner.

3.2.3. Innovation

Fostering innovation and supporting data informed decision making plays a key role in implementing relevant climate actions. With more cities establishing Integrated Command and Control Centres (ICCC) and turning towards digital processes and technology for innovative solutions, there is a need to support relevant data analytics, visualization and frameworks for appropriate use of technology. The Centre will create opportunities for solution



providers to collaborate and support cities in addressing urban climate challenges through fostering innovation including new interventions in areas of data and technology for contextualizing scalable actions across Indian cities.

3.2.4. Capacity Building

Strengthening urban development from a climate lens requires holistic understanding of risks and vulnerabilities, and incorporating the same in the design and implementation of new urban development projects. Therefore, developing capacity of urban practitioners and public officials on ways to use climate lens during project conceptualization and planning will help cities in reducing future risks and enhance urban resilience. The Centre in partnership with training institutes and partner organizations will develop local capacities in the areas of built environment, urban planning, mobility, water resource management and solid waste management, safeguarding green cover and biodiversity, reducing GHG emissions and improving air quality.

3.2.5. Advocacy and communication

Climate action requires a multi-stakeholder engagement. To enable such engagement it is important to create awareness and build sensitization on climate risks and ways to build resilience among individuals, communities and the city as a whole. The Centre will develop communication materials to inform and influence all stakeholders including public and private sector champions at the city, state and national levels.

3.2.6. Partnerships

Many organizations are working with Indian cities, state and national government in various capacities and sectors to address urban and climate related challenges. Under the CSCAF, a national climate alliance comprising of a community of stakeholders to build urban climate resilience in India will be strengthened. The Centre will anchor the alliance and strengthen its reach by onboarding new members. The Centre will also mobilize the alliance to build national and global partnerships that can support Ministry of Housing and Urban Affairs MoHUA and other agencies in their advocacy, knowledge management, capacity building, innovation, and financing to address the increasing climate risks in Indian cities.

3.3 ClimateSmart Cities Assessment framework

As an initial step, under the P4 objective, the Centre will support the MoHUA in the implementation of the ClimateSmart Cities Assessment Framework that was launched in February 2019. CSCAF is a first-of-its-kind city assessment framework on climate relevant parameters for Indian cities. The framework serves as a tool for cities to assess their current climate situation and provides a roadmap for cities to adopt and implement relevant climate actions. The framework consists of 30 indicators across five categories namely; (i) Energy and Green Building, (ii) Urban Planning, Green Cover and Biodiversity, (iii) Mobility and Air Quality, (iv) Water Resource Management and (v) Waste Management. The indicators are progressive in nature to encourage cities to adopt appropriate actions enabling them to improve their score in the future and consequently build climate resilience. To enable this progress, MoHUA aims to conduct the assessment on an annual basis.

As the Centre works to build climate action in Indian cities, the Centre will support the implementation of CSCAF, scaling it up from an assessment of 100 Smart Cities to 500 cities in the next five years. The team lead at the Centre will be part of the CSCAF Strategic Unit and the whole team will be part of the Core Group to ensure efficient implementation of the framework on an annual basis. This will entail coordination with the expert committee, thematic group members and cities to facilitate the execution of the framework in a timely manner. The Centre will prepare the analysis and scrutiny reports after each annual assessment to help cities understand their scores. The Centre will also coordinate with partner organizations working in Indian cities to create synergy across climate actions and strengthen capacities of cities to implement and mainstream climate action to progress in the framework. Finally, the Centre will also support in the documentation of best practices and case studies to showcase progress.

OBJECTIVES			KEY RESULT AREAS
		Policy	
		Creation of climate governance structure at city level	
		Planning	
		Toolkits for urban infrastructure projects	
		Program	
	P4 Support	Support and evaluation	Support to Cities
		Diagnostic reports	
		Project	
		Establishing the Climate Centre for Cities	
		Establishing Secretariat for Climate Alliance	
		Support to cities in establishing data observatory	CSCAF 2.0
		Support for demonstrative projects	
		Review of quarterly plan	
	Research & Knowledge Management	Research publications	
		City need assessments for climate actions	
		Establishing urban data wall at NIUA	Instituting the Centre
		Developing use cases for data observatory	
		Documentation of case studies	
	Innovations	Developing framework for innovation challenges	Strengthening Climate Alliance
		Developing guideline framework for establishing data observatory	
	Capacity Building	Identifying trainers and training institutions	
		Developing training modules	Research to support climate actions
		Providing training to trainers	
	Communication and Advocacy	Developing communication strategy	
		Launch of the virtual platform	
		Creating advisories	Data informed decision making
		Facilitating stakeholder meet	
		Organizing national conference	
		Monthly newsletters and meetings	
	Partnerships	Onboarding alliance partners	Communication and outreach
		Identifying city champions	
		Matchmaking partners with cities	

Figure 3.1 - Objectives and Key Result Areas of the Centre

3.4. Key Result Areas

The Key Result Areas mentioned here are for the first year 2020-21. Linking the KRAs with objectives is illustrated in Figure 3.1.

3.4.1. Establishing the Climate Centre for Cities

The Centre will be instituted within NIUA and its virtual presence through a website will be launched. In addition, an Urban Data Wall illustrating data analytics from different cities that have Integrated Command and Control Centres will be established at the Centre. This wall is intended to inspire and guide the climate action initiated by the Centre.

3.4.2. Support ClimateSmart Cities Assessment Framework

The Centre will provide support for the implementation of CSCAF on an annual basis, evaluate cities performance and develop diagnostic reports for all 100 cities. With a key focus on building capacity, the Centre will identify master trainers and training organizations that can provide training for public officials and urban practitioners, and also identify city champions who can support cities in the assessment. The Centre will develop training modules for each of the 30 CSCAF indicators with support from the climate alliance, and deliver training for the trainers.

3.4.3. Strengthening Climate Alliance

The Centre will establish a secretariat for the climate alliance and will reach out to alliance partners working in the area of climate resilience. In association with alliance partners, the Centre will conduct city need assessment for climate actions and support match-making of partners and interested cities for implementation of demonstrative climate projects. The Centre will also strengthen the climate alliance through strong communication activities.

3.4.4. Promoting data informed decision making

With a key focus on promoting data observatory, the Centre will develop use cases for different urban challenges to illustrate the need for data informed decision making. The Centre will develop guidelines for establishing and provide handholding to cities on need basis.

3.4.5. Supporting cities in climate actions

In order to support cities in taking up climate actions, the Centre will focus on climate strengthening governance and urban projects by creating climate governance structures at city level and developing toolkits for urban infrastructure projects, respectively. The Centre will develop frameworks for mainstream innovative approaches and help scaleup climate solutions across Indian cities.

3.4.6. Conducting research to support climate actions

The Centre will carry out relevant research to inform the current and future climate resilient urban development. This includes and is not limited to the ways urban climate actions can provide pathway to the 5$ trillion economy, analysing climate trends and impacts, urban losses and damages to strengthen urban development and reduce climate risks, laying out framework for the new urban policy and visioning climate proof Indian cities. The Centre will also develop knowledge products on good practices to support peer learning and publish research papers.

3.4.7. Communication and outreach

To bring about awareness, disseminate the Centre's climate actions and strengthen climate related activities with alliance partners and across cities, a strong communication strategy will be developed. This will also include a national conference that will bring all alliance partners and cities together, stakeholder meets to identify relevant gaps in cities, and creating advisories to provide recommendations for the identified gaps.

4.

Institutional Framework for the Climate Centre for Cities

4.1. National Climate Alliance

MOHUA has envisaged and established a 'National Climate Alliance' under CSCAF with an objective to promote and support implementation of climate action in Indian cities. The Alliance will be anchored within the Centre. As the Alliance Secretariat, the Centre will engage with more than 25 organisations that have expressed interest in working as 'Alliance Partners' and support ongoing activities (List of alliance partners in the annexure). This includes support for conducting annual CSCAF assessments, support to cities for mainstreaming climate resilience and improving on CSCAF indicators in terms of demonstrative projects, capacity building, communication, climate advocacy and research.

4.2. Organization structure

The Climate Centre for Cities will be operationalized within NIUA with the support of MoHUA. To achieve its vision of building climate action across Indian cities, the Centre will be organized into the six verticals of its activities and objectives: 1. Policy + Planning + Program + Project (P4) Support, 2. Research and Knowledge Management, 3. Technology and Innovation and Data Solutions, 4. Capacity Building, 5. Advocacy and Communication and 6. Partnerships.

The Climate Centre for Cities will be led by a Centre Lead and the larger governing body will include representatives from the MoHUA, NIUA and other experts on a rotational basis. Figure 4.1 shows the breakdown of how the Centre will be organized within the 6 verticals, their activities, and the number of staff (lead, associates and assistants) for each team

Each vertical will have a core team of professionals and domain-experts to implement the activities in synergy with other verticals and team leads of NIUA as required.

The team will be responsible for the following activities while the Strategic Unit, Expert Committee and Thematic groups support and provide guidance related to CSCAF and the Alliance Partners will strengthen the partnership activities of the Centre *(Details on strategic committee members and core group members in the annexure 5.1 and 5.2 respectively).*

4.2.1. Advisory Committee for the Centre

The advisory committee for the Centre will be comprised of the Joint Secretary, MoHUA, Director of Smart Cities, MoHUA, the Director of NIUA and other urban experts on a rotational basis. This committee will provide the guidance and direction for the Centre and will also serve as the link between the Ministry and the Centre.

4.2.2. Strategic Committee - CSCAF:

The strategic committee for CSCAF will be comprised of five to seven people, including the Joint Secretary, MoHUA as the Chairman and the Director of Smart Cities as the Member Secretary. Other members will include the Director, NIUA, and senior staff at partner organizations like GIZ and WRI. The strategic committee will support the overall implementation and rollout of the framework.

4.2.3. Expert Committee - CSCAF:

The expert committee for CSCAF will be led by a Joint Secretary at MoHUA and the committee will be comprised of urban experts with expertise in the five sectors

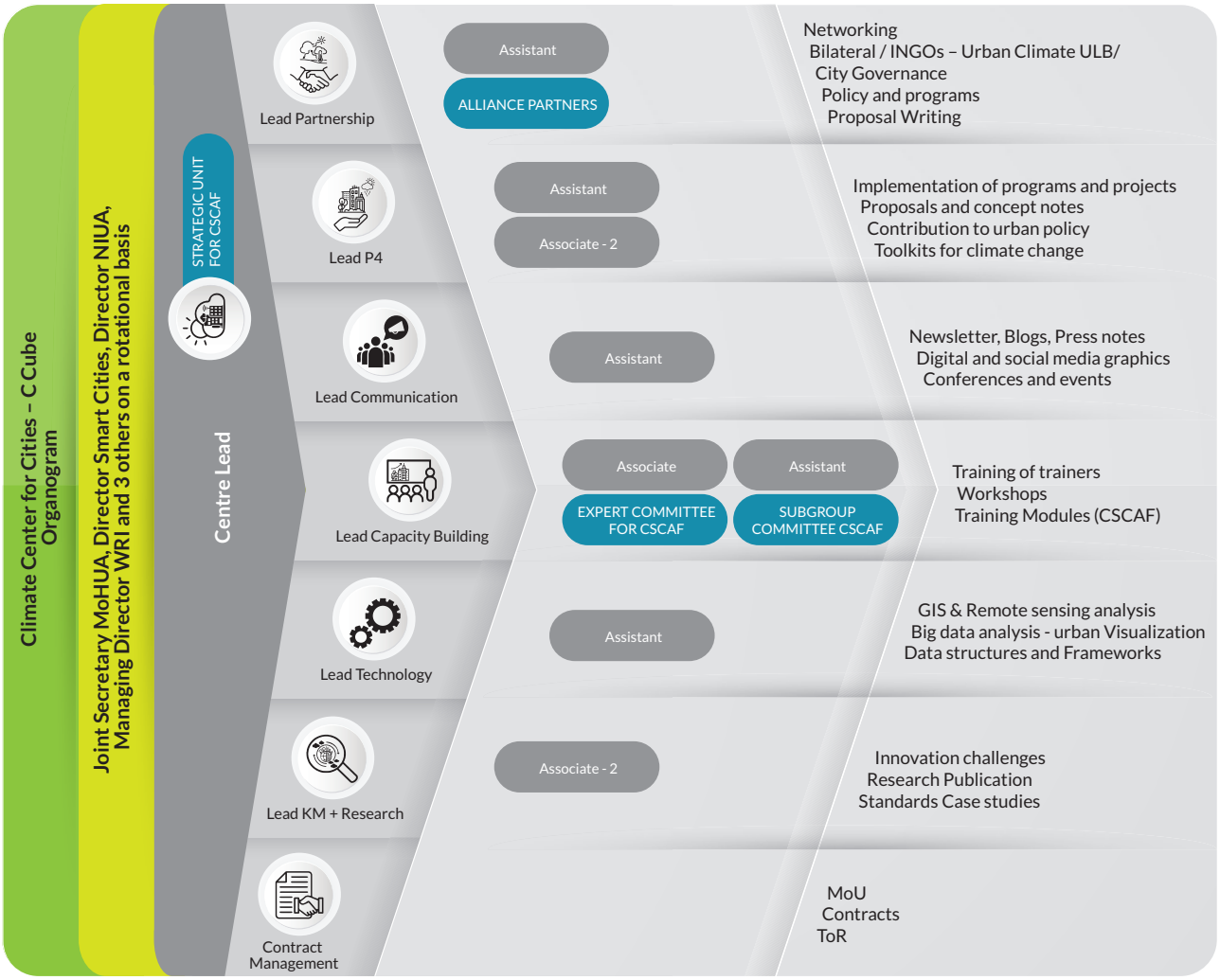


Figure 4.1 - Organogram for the Centre

pertaining to CSCAF (Green Buildings & Energy, Mobility & Air Quality, Urban Planning, Green Cover & Biodiversity, Water Resource Management and Waste Management). The expert committee will evaluate the evidences and rationale that cities upload during the assessment exercise and finalize the scores for the cities as recommendations to MoHUA for release. They will also provide recommendations for city specific implementation of the framework and synergies with stakeholders. Finally, they will provide recommendations to promote ClimateSmart Cities.

4.2.4. Sector Experts & Thematic Group - CSCAF:

There are five sector experts (one for each sector) who will support cities during the implementation of framework. These experts will support cities by answering sector related queries and provide strategic and technical guidance to the cities across their respective thematic areas. They will also play a role in contributing to training and capacity building for the framework.

The thematic group is a larger group of partners that have sectoral expertise in the five sectors of the framework. The thematic group will deliberate and determine if changes are required for the indicators prior to the rollout of the framework annually. They will also support the sector experts with additional information and FAQs during the assessment period.

4.2.5. Centre Lead:

The Centre Lead will be responsible for all activities and outcomes under the six verticals at the Climate Centre for Cities. The lead will work closely with all the vertical leads providing guidance and support in project and program implementation, research and policy making, strengthening partnership, building local capacities and driving urban innovation. The lead will also be the anchor person for all activities for the Project Management Unit (PMU) for the implementation of CSCAF and also be part of the strategic unit for the framework. The Centre Lead will liaison with MoHUA to mainstream climate action through national level programs as well.

4.2.6. Vertical Leads:

There will be six vertical leads at the Centre, one for each pillar of work. The leads will anchor all the activities for their verticals and will be responsible

for the relevant proposals, knowledge products, activities, training modules, tools and outcomes for their respective verticals. They will work closely with the Centre lead to ensure they achieve the desired results and KRAs in a timely manner.

4.2.7. Research Associates:

The Centre will have research associates working within the verticals of P4 support, capacity building, and research and knowledge management. The research associates will work with the leads to develop research publications, knowledge products and support sector experts in analysing the data provided by cities during CSCAF and support in the development of scrutiny reports for CSCAF. They will also support in develop training modules, training of trainers and work with training institutions to support the delivery of training to cities.

4.2.8. Research Assistants:

The research assistants will work with the research associates and vertical leads to support with the Centre activities around development of capacity building modules, coordination with training institutions for cities, coordinate with the Climate Alliance members to support in the implementation of projects, develop material for communication and outreach, and also support in the implementation of CSCAF. Five research assistants will support the activities of each vertical except research and knowledge management.

4.3. Ways to engage with the Centre

The Climate Centre for Cities will build partnerships and engage with a range of stakeholders working in the 'climate change and cities' space in India (refer Figure 4.2). The objective of these partnerships is to bring together the diverse skills, strengths and resources required for initiating and sustaining climate action in Indian cities. The broad terms of reference for these partnerships will include:

4.3.1. Cities (ULBs and Smart City SPVs)

Mainstreaming of climate actions including climate-proofing projects within their ongoing and future interventions will be the basis of most engagements. Partner cities will be expected to provide information on their ongoing work, projects, data and updates for monitoring city's performance on CSCAF, and identify areas where technical, financial or other expertise is needed for improving the same. Cities shall identify training needs within their departments for mainstreaming and implementing climate action. The Climate Centre for Cities will facilitate training and technical assistance through National Climate Alliance members and training institutions to bridge the gap in local capacities, facilitate city to city connect for peer learning, facilitate matchmaking with interested donors to bring financial and technical support in implementing climate actions and also provide direct technical support as and when required. Most Indian cities, although interested in reducing their climate risks face challenges with respect to capacity, finance and technical knowledge, and the centre aims to support cities in bridging this gap.

4.3.2. Multi-laterals and Bi-lateral organisations, Philanthropies, International funding institutions

Most of such agencies are presently working with cities and states to support in sustainable urban development and promoting climate actions. By partnering with the Centre, the agencies will be able to get a holistic understanding of the city needs and provide relevant support. The Centre will providing support to interested agencies in implementing their projects, sharing good practices, and scaling up their intervention across all Indian cities. The agencies may also partner with the Centre for building capacity at local level, fostering innovation, conducting cutting - edge research and implement pilot projects in line with the CSCAF indicators.

4.3.3. INGOs and NGOs

Technical non-government organisations – both national and international have global understanding and knowledge of concepts from different context. In partnering with the Centre, they will be able to easily share their national/ international experiences, good practices, technical learning and

Figure 4.2 - Stakeholder Framework for the Centre

professional knowhow for contextualization and replication of proofs-of-concepts across 100 Indian cities. They may also help facilitate knowledge sharing with cities, experts, and implementing agencies at national and sub-national levels.

4.3.4. Universities, Research and Educational institutions, Technical experts, Rating agencies

These institutions have strong technical knowledge and conduct forward looking research but experience a challenge in sharing with cities and providing further support. In partnering with the Centre, and through this network, they will be able to provide technical expertise, and share good practices, research findings and data with cities for promoting climate action. Further, the Centre will facilitate matchmaking between Universities-Research-and-Educational institutions with cities for pilot studies and pilot projects on climate action, besides bringing innovation, new tools and technology, new methodologies to the forefront and showcase cutting-edge research . Interested institutions can also play a key role in training cities for implementing climate action and improving cities' performance on CSCAF indicators. This will include development and delivery of curricula and training modules for city managers, planners and policy makers, and urban practitioners.

4.3.5 Other stakeholders

Other stakeholders like private businesses, start-ups and communities can also collaborate with the Centre. The Centre will facilitate private businesses in supporting city level actions through corporate social responsibility besides supporting in the promotion of climate resilient business processes, supply lines etc. Through the Centre start-ups will be able to directly work with cities in driving innovative solutions to address urban climate challenges for the ULBs. Local communities can also partner with the Centre for supporting in developing frameworks for participatory planning processes, implementing pilots for building community resilience and contributing to strengthening the public engagement for resilient urban governance and decision making.

The Centre will reach out to above mentioned institutions and organizations, both national and international, to provide platforms for leveraging available expertise, knowledge sharing and funding support for 500 cities in India. One such platform is the National Climate Alliance that currently has 25+ partner organizations along with the Centre working towards these outcomes. The Centre will conduct active outreach to build more such strategic partnerships for policy dialogue and effective on-ground action for mainstreaming urban climate resilience in India.

5.

Annexure

Table 5.1 - Strategic Committee, CSCAF

Role	Sector	Name	Organization
Strategic Committee - Chairman	General	Kunal Kumar	JS & MD (SCM), MoHUA
Strategic Committee - Member Secretary	General	Lal Chhandama	Director- SC I, MoHUA
Strategic Committee	General	Hitesh Vaidya	NIUA
Strategic Committee	General	Vaishali Nandan	GIZ
Strategic Committee	General	O.P. Agarwal	WRI
Strategic Committee	General	Dr. Umamaheshwaran Rajasekar	NIUA
Strategic Committee	General	Anand Iyer	NIUA

Table 5.2 - Core Group, CSCAF

Role	Sector	Name	Organization
Core Group	General	Ashali Bhandari	NIUA
Core Group	General	Vaishnavi Shankar	NIUA
Core Group	General	Raina Singh	NIUA
Core Group	General	Uditi Agarwal	NIUA
Core Group	General	VibhorSood	GIZ
Core Group	General	Prerna Mehta	WRI
Core Group	General	Himanshi Kapoor	WRI

Table 5.3 - Sector Experts, CSCAF

Role	Sector	Name	Organization
Sector Expert	Water	Shyam Mehndiratta	Independent Consultant
Sector Expert	Air Quality	Prarthana Borah	Clean Air Asia
Sector Expert	Mobility	Prerna Mehta	WRI
Sector Expert	Green Buildings & Energy	Kanagaraj Ganesan	Independent Consultant
Sector Expert	Urban Planning, Green Cover, Biodiversity	Raina Singh	NIUA

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